Written Case 7 Rating Sheet

Nurse/Provider Sign-out

- 3-day old girl born at 40 weeks by vaginal delivery after a long induction to 23-year-old G1 mom on buprenorphine for 1 year and doing well. No other medications/exposures.
- Lots of family and friends visited on first day, but mom on her own since. Keeping TV on for company when her husband is not here (he's working 2 jobs to help pay bills).
- In past day: baby fed 10 times, 2 voids, 4 stools (last stool loose and brown), Weight down 6%, 24 hrs. transcutaneous bilirubin (TcB) = 5.8.
- Last assessment was 3 hrs. ago. Baby received all Nos for Eating, Sleeping, and Consoling and 2 for Consoling Support Needed.
- After the assessment, mom went out for a walk and baby was in the nursery for 1.5 hrs. Baby was jittery with increased Moro on exam and kept waking up (every 30-40 min) due to increased startle and tremors when other babies were crying during their newborn testing. Cuddler held baby and had baby suck on cuddler's gloved finger because baby was rooting around and showing excessive suck. Cuddler did not have any of mom's milk to feed baby with. Baby had loose green stool and no void.

In-room Assessment

- Mom now back with baby in their room. Baby was very fussy with tremors when changing her diaper. Mom put baby skin-to-skin and tried latching baby to breast.
- Baby would latch but then would unlatch quickly when mom tried to widen the latch due to pain. When doing so, Mom would touch baby's cheek by mistake and baby would excessively root to baby's fingers. Baby's suck also seemed less coordinated this time, with a "chomping" down feeling on mom's nipple.
- RN came in to assist and helped mom express colostrum while baby sucked on mom's finger. Finally, after 15 minutes of skin-to-skin time and sucking on mom's finger with drops of colostrum, baby was able to coordinate the latch and breastfeed for 10 minutes. RN left to perform scheduled vitals on another baby.
- Mom then loosely swaddled baby and placed her in bassinet. Baby fell asleep quickly but then woke again in 10 minutes due to increased startle and tremors when secretary came in to complete the birth certificate. Baby very fussy when she awoke and did not console with holding, shooshing, and pacifier. After 20 minutes of fussing while held skin-to-skin and sucking on mom's finger, baby finally fell asleep in mom's arms about 10 minutes ago. Baby startled when RN came back to do the ESC assessment.

NOWS/NAS ASSESSMENT	
Are signs of withdrawal present? (e.g., hyperactive moro, tremors/jitteriness, increased tone, excessive/disorganized suck) Yes / No	
If Yes, is timing of withdrawal consistent with known opioid exposure? Yes / No / Unsure	
Are co-exposures present that may be contributing to signs of withdrawal? Yes / No / Unsure (please list co-exposures)	
Are NPIs maximized to fullest extent possible in infant's clinical setting? Yes / No / Unsure	
EATING	
Takes > 10 min to coordinate feeding *or* breastfeeds < 10 min *or* feeds < 10 mL (*or* other age-appropriate duration/volume) **due to NOWS/NAS?** Yes / No	
SLEEPING	
Sleeps < 1 hr due to NOWS/NAS? Yes / No	
CONSOLING	
Takes > 10 min to console (*or* **cannot stay consoled for *at least* 10 min) due to NOWS/NAS?** Yes / No	
Consoling Support Needed **1:** Able to console on own **2:** Able to console within (and stay consoled for) 10 min with caregiver support **3:** Takes > 10 min to console (*or* cannot stay consoled for *at least* 10 min) despite caregiver's best efforts	
CARE PLAN	
Formal Parent/Caregiver Huddle Performed to formally review NPIs to be increased further? Yes / No	
Full Care Team Huddle Performed to formally consider all possible etiologies for symptoms, re-assess if NPIs are maximized to fullest extent possible, and determine if NOWS/NAS medication treatment is needed? Yes / No	
Management Decision **a: Continue/Optimize NPIs** **b: Initiate NOWS/NAS Medication Treatment** (e.g., if baby's symptoms & timing of symptoms are consistent with mother's particular opioid *and* NPIs are maximized to fullest extent possible in infant's clinical setting, *OR* other significant NOWS/NAS concerns are present (e.g., seizures, apnea)) – please list medication(s) initiated **c: Continue NOWS/NAS Medication Treatment** **d: Other** (please describe – e.g., Start 2nd Pharmacologic Agent (indicate name); Wean or Discontinue Medication Treatment)	
PARENT/CAREGIVER PRESENCE SINCE LAST ASSESSMENT	
> 3 hours (includes if parent/caregiver present entire time), **2-3 hours**, **1-2 hours**, **< 1 hour**, **0 hours** (no parent/caregiver present)	
NON-PHARM CARE INTERVENTIONS (I = Increase Now, R = Reinforce, E = Educate for Future, NA = Not Applicable/Available)	
Rooming-in (i.e., caring for infant in their own room with earlier caregiver response to infant stress or hunger cues)	
Parent/caregiver presence to help calm and care for infant	
Skin-to-skin contact when caregiver fully awake/alert to help organize infant feeding behaviors, calming & sleep	
Holding by parent/caregiver/cuddler to help calm infant & aid in sleep (with caregiver fully awake/alert)	
Safe & effective swaddling (e.g., extremities swaddled in flexed position, blanket snug, no extra blanket around baby's face)	
Optimal feeding (e.g., baby offered feedings when showing hunger cues & fed till content)	
Non-nutritive sucking with infant's hand, pacifier, adult caregiver's washed or gloved finger	
Quiet, low light environment to help limit overstimulation of infant (e.g., tv volume down, quiet "white noise" machine or phone app)	
Rhythmic movement provided by parent/caregiver or infant calming device (e.g., "jiggling" or infant swing in presence of alert adult)	
Additional help/support in room (e.g., other parent, family member, friend, cuddler, staff member, recovery coach, DCYF worker)	
Limiting # of visitors & duration of visit(s) to minimize disruptions in infant's care environment & sleep	
Clustering care & assessments with infant's awake times (e.g., RN & infant provider perform assessment together after infant feedings)	
Safe sleep/fall prevention (e.g., infant sleeps on back, safely swaddled, in own sleep space)	
Parent/caregiver self-care & rest (e.g., identifying another adult to care for infant so parent can rest or take a walk/break)	
Optional Comments: (e.g., staff caring for/consoling baby as parents not available or able to safely care for baby)	

Definitions

EATING

- **Takes > 10 min to coordinate feeding** *or* **breastfeeds < 10 min** *or* **feeds < 10 mL** (*or* other age-appropriate duration/volume) **due to NOWS/NAS?:** Baby **unable to coordinate feeding *within* 10 minutes of showing hunger** *OR* **sustain feeding for *at least* 10 minutes at breast** *OR* **with 10 mL by alternate feeding method** (*or other age-appropriate duration/volume)* **due to opioid withdrawal symptoms** (e.g., fussiness, tremors, uncoordinated suck, excessive rooting).
- ***Special Note:* Do not indicate Yes** if poor eating is **clearly due to non-opioid related factors** (e.g., prematurity, transitional sleepiness or spittiness in first 24 hours, inability to latch due to infant/maternal anatomical factors).

SLEEPING

- **Sleeps < 1 hour due to NOWS/NAS:** Baby **unable to sleep for *at least* one hour**, after feeding well, **due to opioid withdrawal symptoms** (e.g., fussiness, restlessness, increased startle, tremors).
- ***Special Note:* Do not indicate Yes** if sleep < 1 hour is **clearly due to non-opioid related factors** (e.g., symptoms in first day likely due to nicotine or SSRI withdrawal, physiologic cluster feeding in first few days of life, interruptions in sleep for routine newborn testing).

CONSOLING

- **Takes > 10 min to console (*or* cannot stay consoled for *at least* 10 min) due to NOWS/NAS:** Baby **takes longer than 10 minutes to console** *OR* **cannot stay consoled for *at least* 10 minutes (due to opioid withdrawal symptoms) despite** infant caregiver/provider's **best efforts to implement NPIs** (e.g., skin-to-skin contact, non-nutritive sucking when baby not hungry).
- ***Special Note:* Do not indicate Yes** if infant's difficulties consoling are clearly **due to non-opioid related factors** (e.g., caregiver non-responsiveness to infant hunger cues, circumcision pain).

CONSOLING SUPPORT NEEDED

1. **Able to console on own:** Able to console on own without any caregiver support needed.
2. **Able to console within (and stay consoled for) 10 min with caregiver support:** Baby with absence of crying, grimacing, or other signs of distress while being held (or otherwise consoled) by a caregiver.
3. **Takes > 10 min to console (*or* cannot stay consoled for *at least* 10 min) despite caregiver's best efforts:** Baby with presence of crying, grimacing, squirming/tensing, or other signs of distress despite a caregiver's best efforts to implement recommended NPIs (e.g., parent/caregiver presence, skin-to-skin, holding, safe swaddling, optimal feeding, non-nutritive sucking when not hungry).

CARE PLAN

- **Formal Parent/Caregiver Huddle**: **RN bedside huddle** with **parent/caregiver** to ***formally* review NPIs that can be optimized** ("Increased") **further to help with infant's current eating, sleeping, and/or consoling difficulties**. To be performed if infant receives **Yes** for any **ESC** item ***or* 3** for **Consoling Support Needed**.
- **Full Care Team Huddle: Formal huddle** with **parent/caregiver**, **infant RN** *and* **physician or associate provider** to 1) **consider all potential etiologies** for symptoms, 2) **re-assess if NPIs** are **maximized** to fullest extent possible in infant's clinical setting, and 3) **determine if NOWS medication treatment is needed**. To be performed if infant **receives 2nd Yes in a row** for **any single ESC** item **(*or* 2nd "3"** for **Consoling Support Needed)** despite **maximal non-pharm care** *OR* ***other significant concerns*** are present**.**

PARENT/CAREGIVER PRESENCE SINCE LAST ASSESSMENT: Time (in hours) since last assessment that parent (or other caregiver) spent together with infant in own room *or* in Nursery.

OPTIMAL FEEDING:

- **Baby feeding at early hunger cues** and **until content** without any limit placed on duration or volume of feeding. Feedings are encouraged **at least every 3 hours, optimally 8-12 times per day**, to ensure baby does not become too hungry or disorganized with feeding and to optimize nutritional intake. A baby may remain sleeping for more than 3 hours *for therapeutic rest* if feeding difficulties or excessive weight loss are *not* present. If a pacifier is used, it should be introduced only after a baby has been fed or offered a feeding. As infants with NOWS/NAS may have poor feeding, have excessive/watery stools, or be hypermetabolic, **closely follow daily weights** and **provide increased volume and/or caloric density** of feedings, as needed, **for more than expected weight loss** *and/or* **poor weight gain for age.**
- **Breastfeeding:** Baby latching deeply with comfortable latch for mother, and sustained active suckling for baby with only brief pauses noted. **If feeding difficulties present**: a) **assist directly with breastfeeding** to help achieve more optimal latch and position, b) **demonstrate hand expression** and have mother **express colostrum prior to and/or during feedings**, and/or c) have baby feed on a clean or gloved adult finger first to **organize suck prior to latching**. As able based on infant's symptoms, consider withholding pacifiers until babies are breastfeeding well due to the potential to interfere with a good latch/suck. Consider use of nipple shield to facilitate palatal stimulation, or supplementation at the breast (as tolerated by mother), if infant requires assistance to maintain latch/suck.
- **Bottle feeding:** Baby effectively coordinating suck and swallow without gagging or excessive spitting up. **If feeding difficulties are present:** a) **assess need for altered nipple shape/flow rate**, b) instruct parent to **provide chin support during feedings**, *and/or* c) **modify position of bottle and flow of milk** to assist baby with feeding (e.g., modified side-lying position).
- **Consult a feeding specialist** (e.g., lactation, speech therapy, feeding team) when **feeding difficulties are present**.